

REMARKS

Claims 1, 5-13, and 17-24 are pending. Claims 1 and 13 have been amended for clarity to recite the various features in separate clauses, and to clean up the claim language. The amendments are not believed to change the scope of the claims, or raise new issues.

Allowable Subject Matter

The indication that claims 9-12 and 21-24 constitute allowable subject matter is noted with appreciation.

Prior Art Rejections

Claims 1, 5-8, 13, and 17-20 stand rejected under 35 USC 103(a) as obvious over Lass, U.S. Patent No. 4,214,667 ("Lass"), in view of Havener, U.S. Patent No. 3,341,909 ("Havener"). The claims are patentable because Lass and Havener fail to teach or suggest several recited features in the independent claims.

Lass discloses a screw mounting mechanism for an electrical outlet box. Lass's mechanism includes a retaining clip 32. The clip 32 has a U-shape, with a bit portion 34 and a pair of legs 36. Col. 3, lines 5-8. The legs 36 each have a generally circular opening 40 with an arcuate projection 42 with an inclined surface 48 having an edge 44. Col. 3, lines 9-30. The clip 32 is installed by inserting the legs 36 into a pair of slots 66 in an end wall 12 of the outlet box 10. The legs 36 each have a ramp 52 with a vertical edge 54 to secure the legs 36 in the slots 66. The outlet box 10 is made of molded plastic, described in Lass as a "molded synthetic box." Col. 2, lines 60-61. A threaded fastener, such as a screw S, is then pushed through the openings 40, with "normal thumb pressure" sufficient to allow the threads of the fastener along the inclined surfaces 48 of the projections 42. Col. 4, lines 3-11. Any attempt to pull the threaded fastener out creates a torque couple about the clip 32 that intensifies the clip's hold on

the threads of the fastener. Col. 4, lines 28-33. Lass does not disclose a threaded rod hanger. In addition, Lass does not disclose a sheet metal body that receives a clip, does not disclose a rod receiving portion with opposite side walls to receive a clip, does not disclose a clip with legs each having a linear series of grooves forming in each leg a thread form profile, does not disclose thread form profiles in respective legs that are offset from each other by one half the pitch of the threads of the rod, and does not disclose angled projections in a housing that guide tips of legs of an insert clip from one set of slots to another.

Havener discloses a clamp made of sheet steel. The clamp includes a bolt 36 that may be used for securing the clamp to a support member S by pressing against the support member S and engaging teeth 43 and 44 of the clamp against the support member S. As shown in Fig. 11 of Havener, the clamp may be used for suspending a rod 70 having a threaded upper portion 71. Havener discloses that part of the rod 70 passes through an aperture 41 in the clamp, with a washer 72 and a nut 73 on the threaded portion 71 used to keep the rod 70 in place. Col. 3, lines 48-58. Havener does not disclose use of clip to hold a threaded rod in place.

Claim 1 recites a rod hanger that includes a body and an insert clip to grip a threaded rod in a rod receiving portion of the body, wherein (among other things) 1) the rod receiving portion includes slots in opposite side walls generally parallel to the rod to receive the insert clip, 2) the clip has parallel spring legs each having a linear series of grooves forming in each leg a thread form profile, 3) the thread form profiles in the respective legs are offset from each other by one half the pitch of the threads of the rod and 4) the housing has angled projections to guide tips of the legs from one set of slots to another. Neither applied reference teaches or suggests any of these four features. Lass does not disclose sets of slots in opposite side walls, nor does Lass disclose slots that are generally parallel to a rod. Lass discloses only two slots 66. To the extent that Lass can be considered to have opposite side walls on either side of its passage from

the screw or threaded fastener S, it does not disclose slots in both such walls. The Action cites an embossment 62 as example of one of Lass's side walls. The embossment 62 ends just above the clip 32. There is no slot in the embossment 62 for either of the legs 36, since the embossment does not even extend down to the level of even the upper leg. Nor does Lass disclose slots that are generally parallel to the rod. To the extent that Lass's screw is a rod, Lass's slots 66 are not parallel to the rod, but rather are perpendicular to the shaft of the screw. Since Havener does not teach or suggest slots for receiving a clip, Havener does not make up for the failure of Lass to teach or suggest the recited slots. Thus for a first reason claim 1 is patentable over Lass and Havener, individually or in combination.

In addition, neither reference teaches or suggests a clip having parallel spring legs each having a linear series of grooves forming in each leg a thread form profile. Lass's legs 36, each having a projection 42 with an edge 44 (referred to in the Action as a "linear series of grooves," nomenclature that is entirely alien to Lass's disclosure) are relied upon for teaching this feature. Without in any way conceding the legs 36 are "spring legs," Lass's projection 42, with its edge 44, does not constitute the recited linear series of grooves. In Lass's device, each leg 36 has only a single projection 42, with an inclined surface 48 terminating in an edge 44. There is no groove at all in such a structure, let alone the recited linear series of grooves. There is only one projection 42 on each of Lass's legs 36. The single projection 42 therefore cannot be considered as a plurality of anything, whether it be linear grooves or any other feature. Havener does not teach or suggest what Lass lacks in this regard, since Havener does not teach or suggest a clip at all. Therefore for another reason claim 1 is patentable over Lass and Havener, either individually or in combination.

Further, Lass and Havener fail to teach the thread form profiles in the respective legs are offset from each other by one half the pitch of the threads of the rod. Lass's projections 42 engage the screw S at different longitudinal locations. There is no

reason for the projections 42 to be offset from one another by the recited one half the pitch of the threads of a rod. Not surprisingly, Lass makes no mention of such an offset, and the Action only repeats the claim language without any indication of how Lass is seen as teaching the feature. Havener does not teach or suggest what Lass lacks in this regard. For yet another reason, claim 1 is patentable over Lass and Havener, either individually or in combination.

Lass and Havener also fail to teach or suggest the recited feature that the housing has angled projections to guide tips of the legs from one set of slots to another. Lass's ramps 52 are cited in the Action, presumably with regard to this feature (they are referred to there as "angled projections"). However, the ramps 52 are on the legs 32 of Lass's clip 32, while claim 1 recites the angled projections as being features of the housing. Lass does not teach or suggest any angled projections, for guiding tips of legs of a clip, as parts of its body. Havener of course also does not teach or suggest the recited housing angled projections. Claim 1 is thus patentable for still another reason over Lass and Havener, either individually or in combination.

Claim 1 is thus patentable over the applied references for at least four reasons. Claim 13, the other pending independent claim, contains similar language to claim 1 regarding the four recited features that Lass and Havener fail to teach or suggest. Claim 13 is thus also patentable over Lass and Havener, either individually or in combination, for multiple reasons.


Conclusion

For at least the foregoing reasons, withdrawal of the rejections of the claims is respectfully requested, in which event this application would be in condition for allowance. Should the Examiner believe that a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

No fee is believed due with the filing of this paper. In the event additional fees are due in connection with the filing of this paper, the Commissioner is authorized to charge those fees to Deposit Account No. 18-0988 (Charge No. ERICP0347US).

Respectfully submitted,
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